AGE-RELATED HAZARDS



As a result of their increasing age, many of Utah's public library buildings manifest a range of serious problems:

- Facilities in seismically critical areas were not designed to meet today's codes, and the oldest among them may have no seismic reinforcement whatever. Many have unbraced chimneys and equipment, and most have shelving that is not braced or anchored.
- ❖ Older libraries were designed to serve smaller populations and therefore to maintain smaller collections than are common today. That means that many were probably not designed to support the weight imposed by current library loads. Some buildings now used as library space were not designed as libraries, and therefore probably lack adequate structure to support library collections. Others may have been designed and structured to hold library shelving and collections in some areas, but not in all of the spaces where stacks are now placed.
- Designed prior to the development of ADA standards, many are not fully accessible, some are only nominally accessible, and a significant number have major collection areas that are not accessible at all.
- Facilities built prior to the 1980s are likely to contain asbestos in air plenums, mechanical areas, sheet rock joint compound, floor tile, ceiling tile, and spray-on ceilings. Older facilities may also have other environmental hazards such as lead paint and PCBs. Many libraries show visible evidence of long-term leaks, and some have musty odors, which could signal the presence of hidden and potentially toxic, mold growth.

Some libraries have identified the presence of environmental hazards, while others suspect them but have not documented them. Known hazards, such as the presence of asbestos in ceiling plenums, have limited some libraries' options in updating wiring, lighting, electrical and



Storage risks



Obstructed electrical panels



Furnace Room



Storage in equipment rooms



Site hazards



Book sales in exit-ways



Asbestos and other environmental hazards



Spaces not designed for library loads



Deferred maintenance





Outdated fixtures and poor lighting

AGE-RELATED HAZARDS



mechanical systems, and space configurations, and affected their ability to perform ongoing maintenance tasks. Perhaps a greater risk lies in the presence of undocumented hazards, particularly in rural areas where libraries are typically maintained and renovated with the labor of community volunteers — without benefit of hazardous materials studies or remediation plans.

- ❖ Few older public libraries have electrical capacity adequate to meet the full demand for 21st century electronic resources. Some have capacity, but do not have adequate power in the locations where it is needed for public access computer workstations and staff equipment.
- ❖ Older libraries display a host of life safety problems. In many smaller libraries, life safety protection currently consists of nothing more than one or two small fire extinguishers. Few were designed with sprinkling systems, and many lack detectors, alarms, lights, and horns. Exits may be inadequate in number, width, or distance of separation for current usage. Panels are not located appropriately for emergency access and may be blocked. Narrow aisles and materials stored or displayed in exit-ways would impede egress in an emergency.
- ❖ Few older public library buildings meet current energy efficiency and performance standards. Many still have original, uninsulated single-pane glazing, for example. Many rely on residential-type swamp coolers or window air conditioners for cooling. While most do not have direct access to operating cost information, since costs are typically paid by the city or county and often not itemized, it seems likely that many of Utah's older public libraries have high ongoing operational costs as a result.
- ❖ In most older libraries, the equipment is as old as the building. Staff report difficulty obtaining parts for outdated mechanical systems, lamps for discontinued light fixtures, and supplies or replacements for other aging equipment items.



Accessibility problems





Exterior damage



Poor energy performance



No seismic bracing



Exiting



Unbraced shelving



Settlement and leaks



Water damage



ADA / accessibility

HAZARDS CREATED BY CRAMPED CONDITIONS



Many of these libraries must pay a double premium: increased purchase cost for rare supplies, and the indirect cost of staff time spent locating parts, supplies, or compatible substitutes.

- ❖ Budget limitations have forced many libraries to defer needed maintenance and repair. Signs of leaks and water damage, worn paint, cracked concrete, rusted handrails, chipped stone, mortar that needs re-pointing, and damaged pavement are common. In some cases, once minor problems have, through neglect, grown into serious hazards.
- ❖ Worn materials and deferred maintenance create potential hazards for patrons. These risk management problems include uneven surfaces, cracked walkways, torn carpet, cords run across floors, plain glass where tempered or safety glass would be required by current codes, and damaged stairways.



Increasing age and lack of space contribute to other hazards that develop when a facility is used in ways for which it was not designed.

- Few of Utah's older public library buildings were designed with dedicated electrical or phone/data areas. Electrical panels have been installed in workrooms, offices, closets, and hallways, where they are often obstructed by furnishings and storage.
- Many libraries lack designated storage space. Some were designed without it, some have converted former storage areas to public use, and some find their original storage area inadequate to today's needs. As a result, most use furnace rooms, stairwells, mechanical and electrical spaces, and corridors for storage. It is not uncommon to find these areas stacked to



Deferred maintenance



Security and vandalism



Worn paint



Fire protection



Exterior deterioration



Lack of electrical



Inadequate restrooms



Exterior power and



Settlement and cracking



Tripping hazards

HAZARDS CREATED BY CRAMPED CONDITIONS



the ceilings with highly combustible materials, including old newspaper collections, paper and craft supplies, and –in one case–gas cans and propane tanks. Many librarians were not aware that this was a code violation; others admitted that they knew they shouldn't do it, but they had nowhere else to put the materials. It seems probable that even the designated storage spaces in many older libraries were not built with fire resistive construction.

- Most older libraries also lack space to distribute informational materials, display community information, conduct used book sales, or store donated materials and items pending sale or disposition. These materials, as a result, are often stored or displayed inappropriately in exit-ways.
- Outside of the major metropolitan areas, few libraries post the code-mandated occupancy limits for public spaces and assembly rooms. In most of these areas, demand for programs such as story-hour has grown exponentially since older libraries were built. At peak times, many of these spaces could exceed rated occupancy, and it seems unlikely that many librarians surrounded by several dozen eager children would have the time to count occupants or be eager to turn away patrons.
- Meeting rooms created in older buildings may not provide adequate exit width, number of exits, or separation between exits. This is particularly critical since many of the most heavily attended library events, such as story hours, involve large groups of young children, who might be expected to panic in an emergency under the best of conditions. It is even more critical because many of these meeting rooms are located in unsprinkled basement areas adjacent to furnace rooms.



Roofing problems



Faulty wiring



Old coal furnaces and coal dust in occupied



Torn carpet



Deterioration at stairs



Materials in exit-ways **LW9060**



Steep stairs

Counter accessibility





Visibility and security 35